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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/403,213	06/22/2000	Matheus Hubertus Maria Noteborn	LEBV.004.01U	6984
24247	7590	10/12/2004	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			WHITEMAN, BRIAN A	
		ART UNIT	PAPER NUMBER	
		1635		

DATE MAILED: 10/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/403,213	NOTEBORN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Brian Whiteman	1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 16 August 2004.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,2,4-16,22 and 25 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 2,5 and 7 is/are allowed.  
 6) Claim(s) 1,4,6 and 8-14 is/are rejected.  
 7) Claim(s) 15,16,22 and 25 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

**Non-Final Rejection**

Claims 1, 2, 4-16, 22 and 25 are pending.

Applicants' traversal, and the amendment to claims 22 and 25 in paper filed on 8/16/04 is acknowledged and considered.

***Specification***

The disclosure is objected to because of the following informalities: The SEQ ID NO: on page 19, lines 7 and 14 is incorrectly labeled. It should be labeled as SEQ ID NO: 4.

Appropriate correction is required.

***Claim Objections***

Claims 15, 16, 22 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 4, 6, 8, and 9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 5,922,600.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims and the claims from '600 recite a gene delivery vehicle comprising a nucleotide sequence coding for chicken anemia virus VP2 and VP3 polypeptide.

Claims 1 and 8-11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 11 and 16 of U.S. Patent No. 6,620,925.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims and the claims from '925 both recite a gene delivery vector comprising a nucleotide sequence encoding apoptin. The only difference between the claims is that the claims from '925 do not specifically recite using a replication defective adenovirus or a replication defective retrovirus as the gene delivery vehicle. However, in light of the definition of gene delivery vehicle in the specification of '925, the claims of '925 read on the instant claims because the specification of '925 teaches that, "gene delivery vehicles are known in the art and our capable of transporting nucleic acid molecules of interest to cells. They include recombinant viruses (such as adenoviruses and retroviruses) as well as polymers and liposomes and the like."

See column 3 of '925.

Claims 1, 4, 6, 8, 9, and 11-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-7 and 9-18 of U.S. Patent No. 6,217,870. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims and the claims from '870 both recite a vector comprising at least one DNA molecule coding for a polypeptide which comprises a chicken anemia virus protein (CAV) VP2 and CAV VP3, wherein the vector is a retroviral vector. In addition, the claims from '870 do not specifically recite a gene delivery vehicle, which comprises at least one target molecule that is reactive with a tumor cell surface receptor set forth in the instant claims 12 and 13. However, the retroviral vector has a target molecule, which is a capsid polypeptide. Retroviral vectors infect tumor cells. Thus, it is inherent that the retroviral vector has a target molecule that is reactive with a tumor cell.

Claims 1 and 8-11 are directed to an invention not patentably distinct from claims 11 and 16 of commonly assigned US Patent 6,620,925. Specifically, the instant claims and the claims from '925 both recite a gene delivery vector comprising a nucleotide sequence encoding apoptin.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned US patents, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the

assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

Claims 1, 4, 6, 7, 8, 9, and 11-14 are directed to an invention not patentably distinct from claims 1, 3-7 and 9-18 of commonly assigned US Patent 6,217,870. Specifically, the instant claims and the claims from '870 both recite a gene delivery vector comprising a nucleotide sequence encoding CAV VP2 and VP3 polypeptides.

Claims 1, 4, 6, 8, and 9 are directed to an invention not patentably distinct from claims 1-5 of commonly assigned US Patent 5,922,600. Specifically, the instant claims and the claims from '600 both recite a gene delivery vector comprising a nucleotide sequence encoding CAV VP2 and VP3 polypeptides.

### ***Conclusion***

Claims 2, 5, and 7 are in condition for allowance because the claims are free of the prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Whiteman whose telephone number is (571) 272-0764. The examiner can normally be reached on Monday through Friday from 7:00 to 4:00 (Eastern Standard Time), with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John LeGuyader, SPE - Art Unit 1635, can be reached at (571) 272-0760.

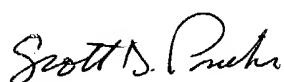
Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

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